

Hazardous Substance & Waste Management Research, Inc.

325 John Knox Road, Suite 404 Executive Court
Tallahassee, Florida 32303-4123
Tel: (904) 681-6894
Fax: (904) 681-6894
J4) 422-1077

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Mr. J. Andrew Goddard, Esq.
Saad Site Steering Committee
Bass Berry & Sims
First American Center
Nashville, TN 37238

Dear Drew:

On the basis of our earlier discussion regarding the U.S. EPA removal action for the Saad site near Nashville, Tennessee, I have prepared the following itemized points associated with soil and groundwater at the site. Contrary to the implicit conclusion of Mr. Stroud's letter, conditions that were identified at the site are not remarkably different than those that were expected on the basis of data which were available approximately a year ago, in early-1994. I have emphasized in these comments those issues which relate to what I believe to be a lack of pressing and urgent need to accomplish the activities on an emergency basis. Those same issues, on the other hand, support remedial consideration under appropriate oversight and coordination, on a much less time-sensitive basis. This site does not differ greatly from many other sites that I see, none of which have been the subject of five removal actions. These issues are relevant for consideration in terms of the immediacy with which the site should be addressed from a risk perspective:

- Groundwater "at the Site", per Mr. Stroud's letter, is not a "drinking water resource" in any real fashion at present, except perhaps by default definition. There are not withdrawal wells on the site or in the vicinity of the site and the industrial character of the area around the site does not suggest that this is likely in the near future. These conditions argue persuasively for containment, control or continued monitoring of groundwater, and a timely feasibility analysis for groundwater treatment, coupled with a reasoned approach to soil treatment if necessary.
- Soil removal by the methods planned will not remove all of the contaminant source(s), considering that comparable levels of contamination (and sludge) are likely to be present on other properties in this highly industrialized area. This means that the issue really is a

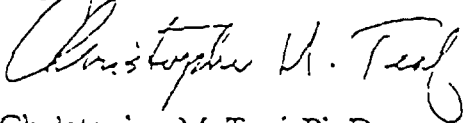
remedial action/feasibility study issue for the Saad site and surrounding area, not a removal action issue that is artificially related only to the specific geographic "spot" defined as the Saad property.

- The constituents which have been measured in soil at the site are not of sufficiently high concentration that they exceed standard risk-based screening levels for industrial/commercial circumstances under direct exposure assumptions, as developed by U.S. EPA for general cases (e.g., Region III screening criteria). Specific examples include benzene at 2.3 mg/kg on-site vs. a 99 mg/kg risk-based concentration; 1,1-dichloroethane at 2.7 mg/kg on-site vs. a 100,000 mg/kg risk-based concentration; 1,1-dichloroethene at 3.1 mg/kg on-site vs. a 4.8 mg/kg risk-based concentration; methylene chloride at 8.8 mg/kg on-site vs. a 380 mg/kg risk-based concentration and toluene at 429 mg/kg on-site vs. a 200,000 mg/kg risk-based concentration. Only trichloroethylene at 267 mg/kg marginally exceeds the generic Region III risk-based screening concentration of 260 mg/kg. Thus, if surface soils were replaced (as has already happened in many areas) and/or capping and covering was instituted on-site, the site could be used for a variety of commercial industrial purposes. Then, groundwater represents the only potential medium of concern. However, the local groundwater is not a drinking water source, no imminent threat exists, and other measures to preclude human exposure can be addressed and implemented following a more conventional RI/FS process. While achievement of MCLs is a desirable long-term goal, it is well-recognized and is acknowledged by regulatory agencies that risk-based methods are available for developing alternative, appropriate, groundwater concentrations which may be used to guide decisions concerning non-potable water sources.
- Many of the instances of elevated contaminant concentrations in soil that are cited in Mr. Stroud's letter are cases of soils which already have been removed (i.e., samples were collected from stockpiles of excavated soil). There was little if any confirmatory sampling following the most recent excavation activities; therefore, these data should not be considered to be representative of site-wide conditions. This type of intentional or unintentional misrepresentation of the data is, at best, sloppy.
- A number of the "groundwater" samples cited in Mr. Stroud's letter represent water that was collected from pits created during excavation activities. This use of the data is completely inappropriate and is in no way representative of local groundwater conditions. Only properly installed and sampled monitoring wells can provide that data. There are many reasons why those data are not usable, not the least of which relates to suspended particulates in such conditions. These particulates will artificially elevate water concentrations and may lead to erroneous site decisions.

- The groundwater data cited in a number of other instances are up to 13 years old. More recent data from wells in the area indicate a much less serious situation. This in turn supports a TDEC-directed, reasoned RI/FS approach, not a blindly applied removal action for soils which doesn't address the issue of groundwater except on a peripheral basis.
- An evaluation of the detected concentrations of discrete analytes in soil at the Saad site, even considered in light of the maximum detected concentrations, does not indicate an immediate, imminent risk to public health, welfare or the environment if even minimal exposure precautions are maintained. Neither health nor environmental issues related to the Site are sufficient to justify a continuing precipitous excavation and "removal" mandate. On the contrary, a well-designed and executed remedial investigation and engineering evaluation of the best approach to subsequent remediation at the site and surrounding area is more technically defensible and is more in line with cleanup activities at other comparable U.S. sites with which I am familiar. The "previous studies" which are cited in Mr. Stroud's letter, and which are presented in part in the renewed motion for access, are evidence that at least some parts of the agency have been well-aware of the site conditions for over a decade. That argues strongly for the agency to shift the supervision of this site to its more conventional state/federal remediation programs, rather than to expend money at a premium, on an emergency basis, for a condition which is clearly not an emergency.

Please call me at (904) 681-6894 in the event that you require additional information concerning these issues.

Regards,



Christopher M. Teal, Ph.D.
President & Director of Toxicology

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cc: Bennie Underwood, de maximus